Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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UTILITY
PATENT APPLICATION
TRANSMITTAL

4928-108.1 US Attorney Docket No. First Inventor Wen-Yi Kuo Adaptive Channel Estimation Using Continuous Pilot Signal Based on Title Doppler Period

S (Only for new nonprovisional applications under 37 C.F.R. 1.53(b)) Express Mail Label No. EV 355379060 US Assistant Commissioner for Patents APPLICATION ELEMENTS ADDRESS TO: Box Patent Application See MPEP chapter 600 concerning utility patent application contents. Washington, DC 20231 1. Fee Transmittal Form (e.g., PTO/SB/17) 7. CD-ROM or CD-R in duplicate, large table or (Submit an original and a duplicate for fee processing) Computer Program (Appendix) 2. Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) See 37 CFR 1.27. 3. 🛛 Specification [Total Pages | a. Computer Readable Form (CRF) (preferred arrangement set forth below) b. Specification Sequence Listing on: Descriptive title of the Invention i. CD-ROM or CD-R (2 copies); or - Cross Reference to Related Applications ii. 🗌 paper Statement Regarding Fed sponsored R & D c. Statements verifying identity of above copies - Reference to sequence listing, a table, or a computer program listing appendix **ACCOMPANYING APPLICATIONS PARTS** - Background of the Invention - Brief Summary of the Invention 9. 🔲 Assignment Papers (cover sheet & document(s)) - Brief Description of the Drawings ( if filed) 10. 37 C.F.R.§3.73(b) Statement Power of - Detailed Description (when there is an assignee) Attorney - Claim(s) - Abstract of the Disclosure 11. 🔲 English Translation Document (if applicable) 4. 🔯 Drawing(s) (35 U.S.C.113) [Total Sheets 5 12. Information Disclosure Copies of IDS ] Statement (IDS)/PTO-1449 Citations 5. Oath or Declaration [Total Pages 1 13. Preliminary Amendment a. Newly executed (original or copy) 14. 🛛 Return Receipt Postcard (MPEP 503) b. Opy from a prior application (37 CFR 1.63 (d)) (Should be specifically itemized) (for a continuation/divisional with Box 18 completed) 15. Certified Copy of Priority Document(s) i. DELETION OF INVENTOR(S) (if foreign priority is claimed) Signed statement attached deleting inventor(s) 16. Nonpublication Request under 35 U.S.C. 122 named in the prior application, see 37 CFR (b)(2)(B)(i). Applicant must attach form PTO/SB/35 1.63(d)(2) and 1.33(b). or its equivalent. 6. Application Data Sheet. See 37 CFR 1.76 17. 🔲 Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: □ Continuation □ Divisional ☐ Continuation-in-part (CIP) of prior application No: 09 / 861,041 Prior application information: Examiner Temesghen Ghebretinsae Group / Art Unit: 2631 For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 17. CORRESPONDENCE ADDRESS or 🔲 Correspondence address below 26817 Name PATENT TRADEMARK OFFICE Address City State Zip Code Country Telephone Fax Name (Print/Type) David P. Krivoshik Registration No. (Attorney/Agent) 39,258 Signature Date November 11, 2003

Burden Hour Statement: This torp is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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# **FEE TRANSMITTAL** for FY 2002

Patent fees are subject to annual revision.

	Complete if Known	
Application Number	ТВА	
Filing Date	ТВА	
First Named Inventor	Wen-Yi Kuo	
Examiner Name	Ghebretinsae, Temeshhen	
Group / Art Unit	2631	•
Attorney Docket No.	4928-108.1 US	

TOTAL AMOUNT OF PAYMENT (\$) 770						Attorney Docket No.			4928-108.1 US					
METHOD OF PAYMENT (check one)							FEE CALCULATION (continued)							
1. ⊠ Depo		indi	cated fees			authorized over paym			3. ADI	DITIONAL Large Entity Fee (\$)	Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
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Depo									127	50	227	25	Surcharge - late provisional filing fee or cover sheet.	
Acco	unt	Mat	hews, Col	lins, Shep	herd (	& McKay, F	P.A.		139	130	139	130	Non-English specification	
Nam									147	2,520	147	2,520	For filing a request for reexamination	
							112	920*	112	920*	Requesting publication of SIR prior to Examiner action			
□ Applicant claims small entity status.     See 37 CFR 1.27  2. ☑ Payment Enclosed:						113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action				
2. 🛛	rayine	III EIIGI	oseu.						115	110	215	55	Extension for reply within first month	
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101	4.7	201	( <b>\$)</b> 370	I Itilita e Glim	a foo		770	ıІ	120	320	220	160	Filing a brief in support of an appeal	
106		206	165	Utility filin	•	_	170	- I	121	280	221	140	Request for oral hearing	
107		207	255	Design fil Plant filin	_	e		<b>亅 ▮</b>	138	1,510	138	1,510	Petition to institute a public use proceeding	
108		208	370	Reissue f	_			. I	140	110	240	55	Petition to revive – unavoidable	
114	160	214	80	Provision	al fillir	ng fee		J	141	1,280	241	640	Petition to revive – unintentional	
			SUBTOTA	. (4)			(\$) 770	- I	142	1,280	242	640	Utility issue fee (or reissue)	
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				Extra		Fee from	Fee		122	130	122	130	Petitions to the Commissioner	
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Multiple Dependent	<u> </u>				×		= 0	1	581	40	581	40	Recording each patent assignment per property (times number of properties)	
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Fee Code	Fee (\$)	Fee Code 203	,,	Fee D					149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
103 102	18 84	203	9 42			cess of 20	excess of 3		179	740	279	370	Request for Continued Examination (RCE)	
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**or num	**or number previously paid, if greater; For Reissues, see above						´	Kedu	ced by Ba	isic Filin	g ree Pa	aid SUBTOTAL (3) (\$) 0		

SUBMITTED BY	SUBMITTED BY Complete (if applicable)						
Name (Print/Type)	David P. Krivoshik	Registration No. Attorney(Agent)	39, 258	Telephone	(609) 924-8555		
Signature		DN N/AH		Date	November 11, 2003		

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NONPUBLICATION REQUEST UNDER 35 U.S.C. 122(b)(2)(B)(i)

First N	lamed Inventor	Wen-Yi Kuo				
Title	Adaptive Channe Based on Dopple	l Estimation Using Continuous Pilot Signal r Period				
Atty D	ocket Number	4928-108.1 US				

I hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).

November 11, 2003

Date

David P. Krivoshik

Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant must notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).

Burden Hour Statement: This collection of information is required by 37 CFR 1.213(a). The information is used by the public to request that an application not be published under 35 U.S.C. 122(b) (and the PTO to process that request). Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 6 minutes to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: WEN-YI KUO : Group Art Unit: 2631

Serial No.: TBA : Examiner: Temesghen Ghebretinsae

Filed: TBA : Date: November 11, 2003

Title: ADAPTIVE CHANNEL ESTIMATION: Attorney Docket: 4928-108.1 US

USING CONTINUOUS PILOT SIGNAL

BASED ON DOPPLER PERIOD

MS Patent Application
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

# LETTER TO OFFICIAL DRAFTPERSON

Enclosed please find five (5) sheets of formal drawings representing Figures 1a through 7 for the above-captioned patent application.

If there are any fees due in respect to this Continuation, please charge them to Deposit Account No. 13-2165. Authority is hereby given to charge any such deficiency, or credit any overpayment to Deposit Account No. 13-2165 Mathews, Collins, Shepherd & McKay. The Examiner is invited to contact the undersigned if further information is required.

Respectfully submitted,

David P. Krivoshik

Reg. No. 39,258

ATTORNEY FOR APPLICANT

MATHEWS, COLLINS, SHEPHERD & MCKAY, P.A.

100 Thanet Circle, Suite 306

Princeton, NJ 08540 Phone: 609-924-8555

Fax: 609-924-3036

### Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express mail in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450 on November 11, 2003.

Joyce Maule

Name

Signature

#### EXPRESS MAIL CERTIFICATE

Express Mail Mailing Label Number: EV 355379060 US

Express Mail Corporate Account Number: X088384

Date of Deposit: November 11, 2003

## Type of Documents:

- 1. Utility Patent Application Transmittal (Large Entity) (1 page);
- 2. Express Mail Certificate (1 page);
- 3. Fee Transmittal Sheet; (1 page);
- 4. Specification (17 pages);
- 5. Letter to USPTO Official Draftsperson (1 page);
- 6. Drawings (5 sheets);
- 7. Declaration (executed) (2 pages);
- 8. Executed Power of Attorney (1 page);
- 9. Non Publication Request (1 page);
- 10. Check for \$770.00 for Filing Fee;
- 11. Acknowledgment Post Card;